# CONTENTS OF VOLUME 30

*Vol 30, No. 1*


*Molecules in Focus*

**J. C. Wallace, S. Jitrapakdee** and **A. Chapman-Smith** — 1 — Pyruvate carboxylase

**Andreu Palou, Catalina Picó, M. Luisa Bonet** and **Paula Oliver** — 7 — The uncoupling protein, thermogenin

**Hirofumi Ogawa, Tomoharu Gomi, Fusao Takusagawa** and **Motoji Fujioka** — 13 — Structure, function and physiological role of glycine *N*-methyltransferase

*Review*

**Paolo Sassone-Corsi** — 27 — Coupling gene expression to cAMP signalling: role of CREB and CREM

*General Papers*

**Motoko Shibanuma** and **Kiyoshi Nose** — 39 — Forced expression of *hic*-5, a senescence-related gene, potentiates a differentiation process of RCT-1 cells induced by retinoic acid

**Naoya Emoto, Hiroyuki Onose, Hitomi Yamada, Shiro Minami, Toshio Tsushima** and **Ichiji Wakabayashi** — 47 — Growth factors increase pericellular proteoglycans independently of their mitogenic effects on A10 rat vascular smooth muscle cells

**María J. Sánchez-Muros, Laura García-Rejón, Leticia García-Salguero, Manuel de la Higuera** and **José A. Lupiáñez** — 55 — Long-term nutritional effects on the primary liver and kidney metabolism in rainbow trout. Adaptive response to starvation and a high-protein, carbohydrate-free diet on glutamate dehydrogenase and alanine aminotransferase kinetics

**Ryowon Choue Dokko, B. H. Simon Cho** and **Byung Hong Chung** — 65 — Cellular uptake of stearic, oleic, linoleic, and linolenic acid and their effects on synthesis and secretion of lipids in Hep-G2 cells

**Toshiyuki Edano, Natuyo Kumai, Toshimi Mizoguchi** and **Masao Ohkuchi** — 77 — The glycosylation sites and structural characteristics of oligosaccharides on recombinant human thrombomodulin

**Francisco A. Leone, Luciana A. Rezende, Pietro Ciancaglini** and **João M. Pizauro** — 89 — Allosteric modulation of pyrophosphatase activity of rat osseous plate alkaline phosphatase by magnesium ions

**Damian F. Cunningham** and **Brendan O'Connor** — 99 — A study of prolyl endopeptidase in bovine serum and its relevance to the tissue enzyme

**Seán P. Gallagher** and **Brendan O'Connor** — 115 — A study of a highly specific pyroglutamyl aminopeptidase type-II from the membrane fraction of bovine brain

**Amalia Tabib** and **Uriel Bachrach** — 135 — Polyamines induce malignant transformation in cultured NIH 3T3 fibroblasts

**Bidhan C. Koner, Madhu Jain** and **Debabrata Dash** — 147 — Platelets from eclampsia patients have reduced membrane microviscosity and lower activities of the signalling enzymes

**Beatrice Dragani, Vincenzina Iannarelli, Nerino Allocati, Michele Masulli, Mario Cicconetti** and **Antonio Aceto** 155 Irreversible thermal denaturation of glutathione transferase P1-1. Evidence for varying structural stability of different domains

165 Errata

*Vol 30, No. 2*

*Molecules in Focus*

**D. L. Connolly, C. M. Shanahan** and **P. L. Weissberg** 169 The aquaporins. A family of water channel proteins

**S. W. Crooks** and **R. A. Stockley** 173 Leukotriene B4

**Linda J. Green, A. Paul Mould** and **Martin J. Humphries** 179 The integrin $\beta$ subunit

*Original Papers*

**Mariëlle P. de Moel, Sjenet E. Van Emst-De Vries, Peter H. G. M. Willems** and **Jan Joep H. H. M. De Pont** 185 Purification and isotype analysis of protein kinase C from rat liver nuclei

**F. M. Corrigan, D. F. Horrobin, E. R. Skinner, J. A. O. Besson** and **M. B. Cooper** 197 Abnormal content of $n-6$ and $n-3$ long-chain unsaturated fatty acids in the phosphoglycerides and cholesterol esters of parahippocampal cortex from Alzheimer's disease patients and its relationship to acetyl CoA content

**Anita M. G. van der Wal, Onno Bakker** and **Wilmar M. Wiersinga** 209 The decrease of liver LDL receptor mRNA during fasting is related to the decrease in serum T3

**Hyung-Joo Kwon** and **Doo-Sik Kim** 217 Identification of an endonuclease secreted by human B lymphoblastic IM9 cells

**X. Wang, F. Buck** and **B. Havsteen** 225 Elucidation of a new biological function of an old protein: unique structure of the cobra serum albumin controls its specific toxin binding activity

**Mohammed Soutto, Juan M. Guerrero, Carmen Osuna** and **Patrocinio Molinero** 235 Nocturnal increases in the triiodothyronine/thyroxine ratio in the rat thymus and pineal gland follow increases of type II 5′-deiodinase activity

**P. Gomes, M. P. Serrão, M. A. Vieira-Coelho** and **P. Soares-da-Silva** 243 L-3,4-dihydroxyphenylalanine and L-5-hydroxytryptophan share the same transporter in *Opossum* kidney cells

**Ivana Malá, Jana Ziková, Marcela Špundová, Zdeněk Mareček** and **Gustav Entlicher** 251 Lipid–protein complexes as cholesterol pronucleating agents in human bile

**Peter H. Kay, Donna Harmon, Susan Fletcher, Terry Robertson, Melanie Ziman** and **John M. Papadimitriou** 261 *Pax*7 includes two polymorphic homeoboxes which contain rearrangements associated with differences in the ability to regenerate damaged skeletal muscle in adult mice

**John A. Hamilton, Robert Byrne, Genevieve Whitty, Peter K. Vadiveloo, Nelly Marmy, Richard B. Pearson, Elizabeth Christy** and **Anthony Jaworowski** 271 Effects of wortmannin and rapamycin on CSF-1-mediated responses in macrophages

**Jorge O. Ossola** and **María L. Tomaro** 285 Heme oxygenase induction by UVA radiation. A response to oxidative stress in rat liver

*Vol 30, No. 3*

*Molecules in Focus*
**David A. Clark** and **Robina Coker** 293 Transforming growth factor-beta (TGF-$\beta$)

**Helmut Ponta, David Wainwright** and **Peter Herrlich** 299 The CD44 protein family

**Mark R. Holt, David R. Critchley** and **Nicholas P. J. Brindle** 307 The focal adhesion phosphoprotein, VASP

*Review*
**David R. Jones** and **Isabel Varela-Nieto** 313 The role of glycosyl–phosphatidylinositol in signal transduction

*General Papers*
**Young Sook Kim, Dong Seon Kim** and **Shin Il Kim** 327 Ginsenoside $Rh_2$ and $Rh_3$ induce differentiation of HL-60 cells into granulocytes: modulation of protein kinase C isoforms during differenti

**Vaughan Oosthuizen, Durand P. Weldrick, Ryno J. Naudé, Willem Oelofsen, Koji Muramoto** and **Hisao Kamiya** 339 Ostrich intestinal glycohydrolases: distribution, purification and partial characterisation

**Poornima Rajasekariah, Robert S. Warlow, Mary E. Campbell, Nesrin Ozsarac, Phuong L. Dao, Michael K. Swanton** and **Ronald S. Walls** 353 Purification and characterization of a human bradykinin binding protein from inflammatory cells

**Gerhard Schenk, Ronald G. Duggleby** and **Peter F. Nixon** 369 Heterologous expression of human transketolase

**Bertram Guibert, Rolf Dermietzel** and **Detlef Siemen** 379 Large conductance channel in plasma membranes of astrocytic cells is functionally related to mitochondrial VDAC-channels

**N. Seiler, F. Douaud, J. Renault, J.-G. Delcros, R. Havouis, P. Uriac** and **J.-P. Moulinoux** 393 Polyamine sulfonamides with NMDA antagonist properties are potent calmodulin antagonists and cytotoxic agents

**Joanne E. Stewart, E. Roy Skinner** and **Philip V. Best** 407 Receptor binding of an apolipoprotein E-rich subfraction of high density lipoprotein to rat and human brain membranes

**Mehran Habibi-Rezaei** and **Mohsen Nemat-Gorgani** 417 Adsorptive immobilization of submitochondrial particles on Fractosil

*Vol 30, No. 4*

*Molecules in Focus*
**J. B. Weiss** and **B. McLaughlin** 423 Endothelial cell stimulating angiogenesis factor

**Nancy C. Andrews** 429 The NF-E2 transcription factor

**Per Venge** and **Jonas Byström** 433 Eosinophil cationic protein (ECP)

**Mark L. Lupher Jr, Christopher E. Andoniou, David Bonita, Sachiko Miyake** and **Hamid Band** 439 The c-Cbl oncoprotein

*General Papers*
**John T. Piper, Sharad S. Singhal, Mohammad S. Salameh, Robert T. Torman, Yogesh C. Awasthi** and **Sanjay Awasthi** 445 Mechanisms of anticarcinogenic properties of curcumin: the effect of curcumin on glutathione linked detoxification enzymes in rat liver

**Maria Anna Rosei, Carla Blarzino, Raffaella Coccia, Cesira Foppoli, Luciana Mosca** and **Chiara Cini** 457 Production of melanin pigments by cytochrome c/$H_2O_2$ system

**Brian M. Cavagnari, Osvaldo L. Córdoba, Jacques H. Veerkamp, José A. Santomé** and **Jorge M. Affanni** 465 Presence of a fatty acid-binding protein in the armadillo Harderian gland

**Shi-Ying Kou** and **Natalie S. Cohen** 475 Ethanol feeding produces deficiencies in left ventricle total RNA, total DNA and mitochondrial ribosomal RNA

**Jae Young Kim, Sook Shin** and **In Kook Park** 487 Effects of the neurotoxin 3-acetylpyridine on levels of soluble proteins and enzyme activities in various tissues of Japanese quail

**M. D. Lograno, F. Bisaccia, A. Ostuni, E. Daniele** and **A. M. Tamburro** 497 Identification of elastin peptides with vasorelaxant activity on rat thoracic aorta

**Lieve Michiels, Joost Haelewyn, Paul Proost** and **Marc De Ley** 505 The soluble extracellular portion of the human interferon-$\gamma$ receptor is a valid substitute for evaluating binding characteristics and for neutralizing the biological activity of this cytokine

**Cecilia Zazueta, Horacio Reyes-Vivas, Gabriela Zafra, César A. Sánchez, Gabriela Vera** and **Edmundo Chávez** 517 Mitochondrial permeability transition as induced by cross-linking of the adenine nucleotide translocase

**Beatriz Rodríguez-Bayona** and **Juan Peragón** 529 Stimulation of rat-liver branched-chain $\alpha$-keto acid dehydrogenase activity by chronic metabolic acidosis

**Susana Afonso, Rafael Enríquez de Salamanca** and **Alcira Batlle** 535 Porphyrin-induced protein structural alterations of heme enzymes II: protection of 5-aminolevulinic acid dehydratase and porphobilinogen deaminase from the photodynamic and non-photodynamic effects of URO and PROTO

545 Erratum

*Vol 30, No. 5*

*Molecules in Focus*
**Thomas J. Gonda** 547 The c-Myb oncoprotein

**Marc G. Coppolino** and **Shoukat Dedhar** 553 Calreticulin

**Matthias Stein-Gerlach, Christian Wallasch** and **Axel Ullrich** 559 SHP-2, SH2-containing protein tyrosine phosphatase-2

**Peter H. Watson, Etienne R. Leygue** and **Leigh C. Murphy** 567 Psoriasin (S100A7)

**Gudrun Stenbeck** 573 Soluble NSF-attachment proteins

*General Papers*
**Jadwiga K. Sierecka** 579 Purification and partial characterization of a neutral protease from a virulent strain of *Bacillus cereus*

**Elena A. Udovikova** and **Lech Wojtczak** 597 Mitochondrial aldehyde reductase: identification and characterization in rat liver and kidney cortex

**Kunio Ohyama, Nobuko Iwamoto, Toshio Bessho, Hajime Watanabe, Shun Hirakawa** and **Toshio Yamakawa** 609 Presence of *Vicia graminea* lectin- and *Vicia unijuga* lectin-binding (Vgu) glycoproteins in human fetal membranes and some of their biochemical properties

**Jo M. Parrelli, Natalie Meisler** and **Kenneth R. Cutroneo** 623 Identification of a glucocorticoid response element in the human transforming growth factor beta 1 gene promoter

**Jong-Suk Kim, Woo-Young Kim, Hye-Won Rho, Jin-Woo Park, Byung-Hyun Park, Myung-Kwan Han, Uh-Hyun Kim** and **Hyung-Rho Kim** 629 Purification and characterization of adenosine diphosphate ribose pyrophosphatase from human erythrocytes

*Book Review*
**S. Mooney** 639 *Buffer solutions: the basics*, R. J. Beynon and J. S. Easterby

*Vol 30, No. 6*

*Molecules in Focus*
**Neil R. Goldsack, Rachel C. Chambers, Karim Dabbagh** and **Geoffrey J. Laurent** 641 Thrombin

**H. J. M. Brady** and **G. Gil-Gómez** 647 Bax. The pro-apoptotic Bcl-2 family member, Bax

**Alain Chariot** and **Jacques Gielen** 651 The HOXC6 homeodomain-containing proteins

**John E. J. Rasko** and **C. Glenn Begley** 657 The thrombopoietic factor, Mpl-ligand

**Peter Carmeliet** and **Désiré Collen** 661 Tissue factor

*General Papers*
**A. M. O. Battastini, T. Emanuelli, L. Koester, M. R. Wink, C. D. Bonan, R. D. Dias** and **J. J. F. Sarkis** 669 Studies on the anchorage of ATP diphosphohydrolase in synaptic plasma membranes from rat brain

**Y. Ueda, Mei-Chuan Wang, B. R. Ou, J. Huang, J. Elce, K. Tanaka, A. Ichihara** and **N. E. Forsberg** 679 Evidence for the participation of the proteasome and calpain in early phases of muscle cell differentiation

**C. D. Bhanumathy** and **A. S. Balasubramanian** 695 Selective inactivation of butyrylcholinesterase with metal chelators suggests there is more than one metal binding site

**Mercedes Castillo, José H. Hortal, Juan A. Aguilera, Ana Linares** and **Eduardo García-Peregrín** 707 Synergism between the effects of dietary cholesterol and coconut oil on plasma, liver and lipoprotein composition of neonatal chick

**Nilay Başaran** and **Emel Arınç** 719 Purification and characterization of two forms of microsomal cytochrome b5 from sheep lung

**Carmelo Garrido-del Solo, Francisco García-Cánovas, José Tudela, Bent H. Havsteen** and **Ramón Varón** 735 New method of evaluation of the kinetic parameters of bi-exponential enzyme-catalyzed reactions

**Ting-Ting Wang, Ann-Shyn Chiang, Jao-Jia Chu, Ting-Jen Cheng, Tzu-Mei Chen** and **Yiu-Kay Lai** 745 Concomitant alterations in distribution of 70 kDa heat shock proteins, cytoskeleton and organelles in heat shocked 9L cells

*Vol 30, No. 7*

*Molecules in Focus*
**Graham Goodwin** 761 The high mobility group protein, HMGI-C

**Sandra D. O'Dell** and **Ian N. M. Day** 767 Insulin-like growth factor II (IGF-II)

*General Papers*

**Christine Dartsch** and **Lo Persson** 773 Recombinant expression of rat histidine decarboxylase: generation of antibodies useful for Western blot analysis

**Pascale Jolivet, Claudine Queiroz-Claret, Edith Bergeron** and **Jean-Claude Meunier** 783 Characterization of an exocellular protein phosphatase with dual substrate specificity from the yeast *Yarrowia lipolytica*

**Adrian Allen, David A. Hutton** and **Jeffrey P. Pearson** 797 The MUC2 gene product: a human intestinal mucin

**P. T. Kilpeläinen** and **O. A. Hietala** 803 Mutation of aspartate-233 to valine in mouse ornithine decarboxylase reduces enzyme activity

**E. A. Veal** and **M. J. Jackson** 811 C-*myc* is expressed in mouse skeletal muscle nuclei during post-natal maturation

**Kouichi Nakamura, Misa Watanabe, Satsuki Sawai-Tanimoto** and **Toshihiko Ikeda** 823 A low catalase activity in dog erythrocytes is due to a very low content of catalase protein despite having a normal specific activity

**Paul K. Wilson, Eve Szabados, Stephen P. Mulligan** and **Richard I. Christopherson** 833 Comparative effects of cladribine, fludarabine and pentostatin on nucleotide metabolism in T- and B-cell lines

**Gerardo Pérez** 843 Isolation and characterization of a novel lectin from *Dioclea lehmanni* (*Fabaceae*) seeds

*Book Review* 855

*Vol 30, No. 8*

*Molecules in Focus*

**Ulla G. Knaus** and **Gary M. Bokoch** 857 The $p21^{Rac/Cdc42}$-activated kinases (PAKs)

**Alan R. Hipkiss** 863 Carnosine, a protective, anti-ageing peptide?

*General Papers*

**Robert B. Low** and **Sheryl L. White** 869 Lung smooth muscle differentiation

**Run Zhang Shi, Stephen D. Lyons** and **Richard I. Christopherson** 885 Metabolic effects of thiopurine derivatives against human CCRF-CEM leukaemia cells

**T. Hayashi, K. Takeshita, N. Tsuchida, K. Kitano, S.-I. Kawabata, S. Iwanaga** and **T. Ito** 897 Purification of a novel muscle cell growth factor s-myotrophin from porcine skeletal muscle

**Johanna Dammeier, Maria Brauchle, Werner Falk, Gary R. Grotendorst** and **Sabine Werner** 909 Connective tissue growth factor: a novel regulator of mucosal repair and fibrosis in inflammatory bowel disease?

**Jerzy Osada** and **Jolanta Zuwała-Jagiełło** 923 Internalization study using EDTA-prepared hepatocytes for receptor-mediated endocytosis of haemoglobin–haptoglobin complex

**Eve Szabados** and **Richard I. Christopherson** 933 Relationship between the catalytic sites of human bifunctional IMP synthase

**Young Hyun Koh, Kwang Ho Choi** and **In Kook Park** 943 Effects of niacin deficiency on the levels of soluble proteins and enzyme activities in various tissues of Japanese quail

*Vol 30, No. 9*

*Molecules in Focus*
**C. E. Turner** 955 Paxillin

*General Papers*
**Acácio A. Pigoso, Sérgio A. Uyemura, Antonio C. Santos, Tiago Rodrigues, Fábio E. Mingatto** and **Carlos Curti** 961 Influence of nonsteroidal anti-inflammatory drugs on calcium efflux in isolated rat renal cortex mitochondria and aspects of the mechanisms involved

**Mónica Marmunti** and **Angel Catalá** 967 Non-enzymatic lipid peroxidation of rat liver nuclei and chromatin fractions

**Dhirendra L. Nandi** and **John Westley** 973 Reduced thioredoxin as a sulfur-acceptor substrate for rhodanese

**R. Kanagaratnam, K. Misiura, G. Rebowski** and **R. Ramasamy** 979 Malaria merozoite surface protein antisense oligodeoxynucleotides lack antisense activity but function as polyanions to inhibit red cell invasion

**S. N. Thompson** 987 Long-term regulation of glucogenesis by dietary carbohydrate and relevance to blood sugar level in an insect *Manduca sexta* L.

**Graciela E. Hurtado de Catalfo** and **I. Nelva T. De Gómez Dumm** 1001 Lipid dismetabolism in Leydig and Sertoli cells isolated from streptozotocin-diabetic rats

**Natesavelalar Chidambaram** and **Chan Fong Chang** 1011 Functional role of glycosylation on the recombinant CD38/ADP-ribosyl cyclase in CHO cells

**David G. Greenhalgh** 1019 The role of apoptosis in wound healing

**Carolina Caro, Susan Colby-Germinario, Bluma Brenner, Maureen Oliveira, Mark A. Wainberg** and **Ralph J. Germinario** 1031 Sugar transport and glut transporter expression in a variety of human immunodeficiency virus-1 (HIV-1) chronically infected target cell lines

**George Dimitriadis, Elizabeth Crowne, Anne Clark** and **David B. Dunger** 1039 Islet amyloid polypeptide decreases the effects of insulin-like growth factor-I on glucose transport and glycogen synthesis in skeletal muscle

**Thomas Guerin, Gerard A. Walsh, John Donlon** and **Seymour Kaufman** 1047 Correlation of rat hepatic phenylalanine hydroxylase, with tetrahydrobiopterin and GTP concentrations

**Patrizia Puddu, Paola Borghi, Sandra Gessani, Peera Valenti, Filippo Belardelli** and **Lucilla Seganti** 1055 Antiviral effect of bovine lactoferrin saturated with metal ions on early steps of human immunodeficiency virus type 1 infection

*Vol 30, No. 10*

*Molecules in Focus*
**Kunihiko Terada, Michael L. Schilsky, Naoyuki Miura** and **Toshihiro Sugiyama** 1063 ATP7B (WND) protein

**Alois Hodel** 1069 SNAP-25

**Eleni Stylianou** and **Jeremy Saklatvala** 1075 Interleukin-1

**Robyn Starr** and **Douglas J. Hilton** 1081 SOCS: suppressors of cytokine signalling

**Ketan Patel** 1087 Follistatin

*Reviews*

**A. López-Farré, J. A. Rodríguez-Feo, L. Sánchez de Miguel, L. Rico** and **S. Casado** 1095 Role of nitric oxide in the control of apoptosis in the microvasculature

**Rajinder N. Puri** 1107 Phospholipase $A_2$: its role in ADP- and thrombin-induced platelet activation mechanisms

*General Papers*

**Jun Ling, Xiang Gao, Wang-Yi Liu** and **Kang-Cheng Ruan** 1123 DNA-cleaving activity of superoxide dismutase specific for circular supercoiled double-stranded DNA *in vitro*

**Ciarán N. Cronin, Devon A. Thompson** and **Finian Martin** 1129 Expression of bovine activin-A and inhibin-A in recombinant baculovirus-infected *Spodoptera frugiperda Sf* 21 insect cells

**Yi Yang, Jian-Xin Xu** and **Hai-Meng Zhou** 1147 Inactivation of succinate–ubiquinone reductase in substrate mixture

*Vol 30, No. 11*

*Molecules in focus*

**D. S. Latchman** 1153 The Brn-3a transcription factor

**Marilyn D. Resh** 1159 Fyn, a Src family tyrosine kinase

**Petr Ježek** and **Keith D. Garlid** 1163 Mammalian mitochondrial uncoupling proteins

**Ian Zachary** 1169 Vascular endothelial growth factor

*Reviews*

**Immo E. Scheffler, Bernard J. de la Cruz** and **Susana Prieto** 1175 Control of mRNA turnover as a mechanism of glucose repression in *Saccharomyces cerevisiae*

**Myriam Polette** and **Philippe Birembaut** 1195 Membrane-type metalloproteinases in tumor invasion

*General Papers*

**Angela R. Davis, Yael G. Alevy, Arasu Chellaiah, Mark T. Quinn** and **T. Mohanakumar** 1203 Characterization of HDJ-2, a human 40 kD heat shock protein

**In Kook Park** and **Jae Young Kim** 1223 Effects of NAD or NADP on the stability of liver and pectoral muscle enzymes in 3-acetylpyridine treated quail by heat and trypsin

**Anna Pastore, Mario Lo Bello, Gabriella Aureli, Giorgio Federici, Giorgio Ricci, Carmine Di Ilio** and **Raffaele Petruzzelli** 1235 Purification and characterization of a novel alpha-class glutathione transferase from human liver

**Mira Grdiša** 1245 Regulation of glyceraldehyde-3-phosphate dehydrogenase in differentiating HD3 cells

**Milan Miko** and **Ferdinand Devinsky** 1253 Cytoxicity of 1-alkylperhydroazepine *N*-oxides and quantitative structure-activity relationships

**Ross K. McCulloch, Caroline E. Walker, Aron Chakera, Jalal Jazayeri** and **Peter J. Leedman** 1265 Regulation of EGF-receptor expression by EGF and TGFα in epidermoid cancer cells is cell type-specific

**Book Reviews** 1279

*Vol 30, No. 12*

*Molecules in Focus*

**Lars Thim, Peter Kristensen, Philip J. Larsen** and **Birgitte S. Wulff** 1281 CART, a new anorectic peptide

**Paolo Prolo, Ma-Li Wong** and **Julio Licinio** 1285 Leptin

**Edith H. Postel** 1291 NM23-NDP kinase

*Review*

**Gerhard Schenk, Ronald G. Duggleby** and **Peter F. Nixon** 1297 Properties and functions of the thiamin diphosphate dependent enzyme transketolase

*General Papers*

**Yan Shi, Wei Luo, Wei-Xi Tian, Tong Zhang** and **Hai-Meng Zhou** 1319 Inactivation and conformational changes of fatty acid synthase from chicken liver during unfolding by sodium dodecyl sulfate

**M. Wirén, K. E. Magnusson** and **J. Larsson** 1331 The role of glutamine, serum and energy factors in growth of enterocyte-like cell lines

**Jae Young Kim** and **In Kook Park** 1337 Effects of 6-aminonicotinamide on levels of soluble proteins and enzyme activities in various tissues of Japanese quail

**M. Madesh, O. Benard** and **K. A. Balasubramanian** 1345 Glutathione modulates lipid composition of human colon derived HT-29 cells

**I. Sokal, M. Janusz** and **J. Lisowski** 1353 Interaction of IgG immunoglobulins with the guinea pig peritoneal macrophage Fcγ receptors. Effect on the association of the receptors with the membrane skeleton and the cytoskeleton

**Badithe T. Ashok, Jabeen Ahmad** and **Rashid Ali** 1367 Immunochemical detection of oxidative DNA damage in cancer and aging using anti-reactive oxygen species modified DNA monoclonal antibody

**Z. G. Gao, C. K. Lau, S. C. L. Lo, S. Y. Choi, J. E. Churchich** and **F. Kwok** 1379 Porcine pyridoxal kinase. c-DNA cloning, expression and confirmation of its primary sequence

**He Li, Phillip J. Robinson, Seiichi Kawashima, John W. Funder** and **Jun-Ping Liu** 1389 Differential regulation of MAP kinase activity by corticotropin-releasing hormone in normal and neoplastic corticotropes

**Osvaldo L. Córdoba, Eduardo I. Sánchez, Jacques H. Veerkamp** and **José A. Santomé** 1403 Presence of intestinal, liver and heart/adipocyte fatty-acid-binding protein types in the liver of a chimaera fish

**John J. Kresl, Lawrence A. Potempa** and **Byron E. Anderson** 1415 Conversion of native oligomeric to a modified monomeric form of human C-reactive protein

*Book Reviews*

**Suzanne Mooney** 1427 *Prions and brain diseases in animals and humans*, Douglas R. O. Morrison

**Suzanne Mooney** 1428 *Identification and expression of G protein-coupled receptors*, Kevin R. Lynch